

64. (Amended) A non-invasive method for obtaining a skin sample for use in isolating or detecting a nucleic acid in the skin sample, the method comprising:

(a) applying at least one application of an adhesive to the skin and removing the adhesive from the skin in a manner such that the skin nucleic acid profile after application is not affected for up to about two hours and such that a sample comprising a nucleic acid adheres to the adhesive after its removal, or, scraping the skin with an instrument to remove a sample comprising a nucleic acid from the skin, thereby obtaining a skin sample comprising a nucleic acid; and

(b) isolating or detecting the nucleic acid from the skin sample of step (a).

65. (Amended) The method of claim 64, wherein the skin sample comprises at least one of stratum corneum cells, stratum lucidum cells, stratum granulosum cells, stratum spinosum cells, and stratum basalis cells.

70. (Amended) The method of claim 64, wherein the skin sample is isolated by applying the adhesive surface to the skin between one and twenty five times to obtain the skin sample.

71. (Amended) The method of claim 64, wherein the skin sample is isolated by applying the adhesive surface to the skin between one and two times to obtain the skin sample.

72. (Amended) The method of claim 64, wherein the sample is isolated by one application of an adhesive surface to an outer layer of the skin.

82. (Twice amended) The method of claim 80, wherein the cytokine comprises interleukin-1 (IL-1), interleukin-2 (IL-2), interleukin-3 (IL-3), interleukin-4 (IL-4), interleukin-5 (IL-5), interleukin-6 (IL-6), interleukin-8 (IL-8), interleukin-10 (IL-10), interleukin-12 (IL-12), interleukin-13 (IL-13), granulocyte macrophage colony stimulating factor (GM-CSF), or an interferon, or any combination thereof.

104. (Amended) A non-invasive method for obtaining a skin sample for use in isolating or detecting nucleic acid encoding a cytokine in the skin sample, the method comprising:

applying an adhesive surface to the skin and removing the adhesive surface from the skin such that a skin sample comprising nucleic acid in an amount sufficient for subsequent isolation or detection adheres to the adhesive surface after its removal and in a manner such that the skin nucleic acid profile after application is not affected for up to about two hours, thereby obtaining a skin sample for use in isolating or detecting a nucleic acid in a skin sample.

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105. (Amended) The method of claim 104, wherein the skin sample comprises at least one of stratum corneum cells, stratum lucidum cells, stratum granulosum cells, stratum spinosum cells, and stratum basalis cells.

106. (Amended) The method of claim 105, wherein the sample is isolated by one application of an adhesive surface to an outer layer of the skin.

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111. (Amended) The method of claim 104, wherein the skin sample is isolated by applying an adhesive surface to the skin between one and twenty five times.

112. (Amended) The method of claim 104, wherein the skin sample is isolated by applying an adhesive surface to the skin between one and two times.

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123. (Amended) The method of claim 121, wherein the cytokine is interleukin-1 (IL-1), interleukin-2 (IL-2), interleukin-3 (IL-3), interleukin-4 (IL-4), interleukin-5 (IL-5), interleukin-6 (IL-6), interleukin-8 (IL-8), interleukin-10 (IL-10), interleukin-12 (IL-12), interleukin-13 (IL-13), granulocyte macrophage colony stimulating factor (GM-CSF), or an interferon or any combination thereof.

124. (Amended) The method of claim 121, wherein the cytokine is an inflammatory mediator.

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135. (Amended) A non-invasive method for obtaining a skin sample for use in isolating or detecting nucleic acid in the skin sample, the method comprising:

scraping the skin with an instrument to remove a skin sample comprising nucleic acid in an amount sufficient for subsequent isolation or detection, and in a manner such that the skin nucleic acid profile after application is not affected for up to about two hours, thereby obtaining a skin sample for use in isolating or detecting a nucleic acid in a skin sample.

136. (Amended) A non-invasive method for obtaining a skin sample for use in isolating or detecting a nucleic acid in a skin sample, the method comprising:

- (a) scraping the skin with an instrument to remove a sample comprising a nucleic acid from the skin, thereby obtaining a skin sample comprising a nucleic acid;
- (b) isolating or detecting the nucleic acid from the skin sample of step (a).

Please add the following claims:

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137. The method of claim 80, wherein the cytokine is IL-1.

138. The method of claim 80, wherein the cytokine is IL-2.

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139. The method of claim 80, wherein the cytokine is IL-3.
140. The method of claim 80, wherein the cytokine is IL-4.
141. The method of claim 80, wherein the cytokine is IL-5.
142. The method of claim 80, wherein the cytokine is IL-6.
143. The method of claim 80, wherein the cytokine is IL-8.
144. The method of claim 80, wherein the cytokine is IL-10.
145. The method of claim 80, wherein the cytokine is IL-12.
146. The method of claim 80, wherein the cytokine is IL-13.
147. The method of claim 80, wherein the cytokine is GM-CSF.
148. The method of claim 80, wherein the cytokine is an interferon.

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